

REMARKS

The Examiner has rejected Claims 1-11, 15-18, 20-21 and 23 under one of 35 U.S.C. §§102(a), (b) or (e), based on the contention that they are anticipated by one of PCT Publication No. WO 97/24600, for Shine et al (Shine '600), U.S. Patent No. 5,314,604, issued to Friese et al (Friese '604), U.S. Patent No. 5,393,401, issued to Knoll (Knoll '401), U.S. Patent No. 4,647,362, issued to Watanabe et al (Watanabe '362), U.S. Patent No. 5,727,977 issued to Maracas et al (Maracas '977) and Japanese Patent No. JP 06324014A, issued to Fokuda (Fokuda '014). Further, the Examiner has rejected Claims 1-3, 6, 7, 12, 20 and 23 under 35 U.S.C. §103(a), based on the contention that they are unpatentable over one or more of Japanese Patent No. 0921778A, issued to Toyama et al (Toyama '778), and Fokuda '014. Applicant respectfully traverses the Examiner's rejections. To expedite the prosecution of the application, however, Applicant has amended independent Claim 1, and added new claims 24-29, to better clarify the present invention. Applicant submits that, as amended and added, the claims of the present application are not taught, disclosed or suggested by any of the cited references, either alone or in combination with one another.

Specifically, Claim 1 has been amended to specify that the at least one conducting layer has a thickness in the range of 1-10 microns, and that the aperture has a diameter in the range of 0.5 to 500 microns, and is a through-hole which extends through the laminated structure and is open at both ends. These limitations include new limitations from the specification itself, and the limitations of former Claim 5 (now deleted, along with redundant claims 6, and 11-13). Similarly, Claim 24 has been added claiming an alternative embodiment of the invention having the same ranges for the conducting layer thickness and a well element.

As can be seen, the present invention has been clearly amended to apply to a microelectrode system. The range of thicknesses and aperture/well sizes help to clarify the sizing specifications of the microelectrode structure. Specifically, the limitation of the thickness to a range of 1-10 microns is described in the specification at Page 6, Line 11, while the limitation of the aperture to a diameter of 0.5 to 500 microns is described at Page 5, Line 33. Thus, each of the amendments to Claim 1 presents no new matter to the present specification, while overcoming the cited references as described below.

The additional claims added, namely Claims 25-29, correspond to other pending claims. Claim 25 corresponds to former Claim 12 (now deleted), Claim 26 to former Claim 13 (now deleted), Claim 27 to Claim 14 (deemed allowable), Claim 28 to Claim 19 (deemed allowable), and Claim 29 to Claim 22 (deemed allowable).

Substantively, the presently amended and added claims read over all of the references cited by the Examiner because none of those references relate to a microelectrode system. Instead, each of Shine '600, Friese '604, Knoll '401, Watanabe '362, and Toyama '778 relate solely to a macroelectrode system. Thus, none of the references relate to the present invention at all.

Maracas '977 discloses an invention that relates solely to field emission devices with a closed-end well, while Fokuda '014 discloses an unrelated bio-sensor device. There is no teaching or suggestion in either reference of a microelectrode system with a laminate structure having an aperture that is a through-hole that is open at both ends, as now claimed in Claim 1. Further, both references additionally fail to teach or suggest a pair of collinear wells that have a common well bottom, as claimed in Claim 24. Therefore, Applicant submits that Claims 1 and 24 are in allowable condition as written.

Based on the above, Applicant submits that independent Claims 1, 24, 27, 28 and 29 are all in allowable condition as written. Therefore, all of the remaining claims which depend therefrom, namely Claims 2-4, 7-10, 14-23, and 25-26 should also be in condition for allowance. Accordingly, reconsideration and passage to allowance of Claims 1-4, 7-10, and 14-29 is respectfully requested.

Should anything further be required, a telephone call to the undersigned, at (312) 226-1818, is respectfully invited.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 2, 2003.

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